

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION
WDID NO. 6A090089000
MONITORING AND REPORTING PROGRAM NO. 2014-(TENT)
FOR
TAHOE KEYS PROPERTY OWNERS ASSOCIATION

El Dorado County

I. MONITORING

The following monitoring program must be implemented.

A. General Information

1. General Provisions: This Monitoring and Reporting Program (MRP) includes requirements for monitoring and reporting management actions and water quality data as required under Board Order No R6T-2014-XXXX. The Discharger shall comply with *General Provisions for Monitoring and Reporting*, dated September 1, 1994, which is included as Attachment "1" and made part of this Monitoring and Reporting Program.
2. Monitoring: The purpose of water quality monitoring is to detect changes in the physical and chemical conditions in the waters as a result of Facility operations, and to monitor compliance with waste discharge requirements. Because the numerous Facility components may readily be taken in and out of operation, it is the intent of this sampling program to provide comprehensive monitoring while minimizing duplicative sampling requirements as a result of overlap and lapses in the operation of Facility equipment. For the purposes of this monitoring program, "weekly thereafter" means a monitoring frequency of seven (7) days.
3. Analytical Reporting Limits: Because of the unique nature of waters in the Lake Tahoe Basin, exceptional analytical testing capabilities for nutrients and other contaminants are generally required to assure compliance with water quality standards and non-degradation objectives specified in the *Water Quality Control Plan for the Lahontan Region* and the WDR Permit for the Facility. Reporting Limits, or RLs, for chemical analyses are therefore specified herein. Values for RLs (which are analytical reporting limits) are typically 4 to 5 times higher than minimum detection limits, or MDLs. RLs shall be, at a minimum, as sensitive as the more restrictive of those required for analysis of pollutants (40 Code of Federal Regulations, Part 136), or analysis of drinking water (California Code of Regulations, Title 22, Division 4, Chapter 15; or 40 Code of Federal Regulations, Part 141).

B. Water Quality Monitoring for Circulation System

The purpose of this monitoring is to ensure operation of the circulation system does not adversely affecting water quality.

1. Sampling Locations – Lagoon and Marina Water Quality Monitoring: The following surface water quality sampling stations have been consistently monitored under previous permits, and shall continue to be monitored for consistency under this WDR permit: the West Side Pump Station intake (W); the East Side Pump Station intake (E); a discharge point near the West Channel ingress/egress (3); and a discharge point in a cove furthest from West Channel (13). Water quality sampling locations are specified in Attachment “B” of the WDR permit. Samples shall be collected within 10 feet of the referenced sampling location.
2. Sampling Frequency: Samples shall be taken at a minimum of monthly frequency, with at least one sample taken before circulation, at least once during circulation, and one sample within a week of cessation of circulation.
3. Sample Type: Representative grab samples of waters to be analyzed shall be considered sufficient for the purposes of this monitoring program.
4. Analysis of Samples: All analyses shall be performed in accordance with Attachment 1, General Provisions for Monitoring and Reporting.
5. Samples in Sections B.1 need not be collected when the circulation system is not operated or if substantial ice cover in the sampling location is documented. . When samples cannot be collected due to weather or other conditions the Discharger shall submit a report stating the reason for why sample data is not collected during that month.
6. Monitoring Parameters
Water quality samples shall be collected and analyzed for each of the parameters in Table 1.

Table 1: Monitoring Parameters

Parameter	Units	Reporting Limit (RL)
Dissolved Oxygen	mg/L	0.05 mg/L
Temperature	°F or °C	0.2 °F or 0.1 °C
Nitrate and Nitrite Nitrogen	mg/l as N	0.01 mg/l as N
Ammonia Nitrogen	mg/l as N	0.01 mg/l as N
Total Kjeldahl Nitrogen	mg/l as N	0.08 mg/l as N
Total Phosphorus	µg/l as P	8 µg/l as P
Dissolved Reactive (Ortho) Phosphorus	µg/l as P	8 µg/l as P

C. Aquatic Plant Monitoring Plan

The Discharger is to prepare a monitoring plan for aquatic plants in cooperation with Water Board, TRPA, and other Agency staff as appropriate by **January 31, 2016**. TKPOA is to survey Tahoe Keys Lagoon and Tahoe Keys Marina initially and thereafter annually for aquatic plant types and their respective percent cover, plant height and estimated biomass, and create accurate weed location maps and summarize findings initially and thereafter in annual reports. TKPOA is to follow monitoring protocol similar to that of Sierra Ecosystem Associates, 2013¹ given in “Method” Sections 2.1-2.3 of that report, summarized below:

- Survey work is to be timed to capture non-native plants Curly-leaf pondweed and Eurasian watermilfoil at maturity and at the end or peak of their growing period. This typically occurs mid-to-late August.
- A Hazard Analysis and Critical Control Plan (HACCP) to prevent the spread of plant propagules (including aquatic invasive plant species fragments and curly-leaf pondweed turions) by survey activities is to be prepared and followed.

¹ Sierra Ecosystem Associates (SEA), 2013. Lake Tahoe Aquatic Plant Survey Project: 2012 Results. Prepared for Tahoe Regional Planning Agency.

- Survey data for larger infestations of non-natives is to include transects with data points were taken every 20 feet along 100-foot sections, and for smaller infestations, square footage as well as plant composition, and plant height information are to be taken.

The monitoring plan may be part of the IMP or may be developed separately (WDR Order Section II.C). The monitoring plan will be implemented upon submission of the plan to Water Board staff. Annually, beginning in January 31, 2017, submit aquatic plant monitoring reports.

D. Bottom Barrier Monitoring Report

1. Monitoring Report - TKPOA shall implement the monitoring program documented in the Bottom Barrier Monitoring Plan from Finding 15 and Section III.A. of the Order and shall provide Monitoring Reports at least annually to the Water Board. The Monitoring Report shall document status of performance standards and project goals. Each Monitoring Report shall include:
 - a. A summary of findings - inspection results including anchor and bottom barrier integrity and other observations.
 - b. Identification and discussion of problems with achieving performance standards.
 - c. Proposed corrective measures, to be approved by the Regional Water Board.
 - d. Monitoring data, if any.

E. Flow Monitoring

If the circulation system is operated, TKPOA shall keep a log or permanent record of the following:

1. Average daily flow rate at monitoring location D during operation of the East Side Pump Station and/or West Side Pump Station, in millions of gallons per day.
2. Total volume of water discharged at monitoring location D during operation of the East Side Pump Station and/or West Side Pump Station in millions of gallons.
3. Estimated volume of water, in millions of gallons, discharged on a daily and monthly basis from each of the following locations: 6, 7, C1, C2, C3, C4, C5, and C6.

F. Operations and Maintenance of Water Circulation System

The Discharger shall keep a log or permanent record of the following:

1. For any Facility pump, the dates and hours of operation, the pump number or name, and the rated or estimated flow rate(s) during operation.
2. The calibration of any flow measuring devices.

II. REPORTING

A. Report Format

1. The Discharger shall arrange the monitoring data in a concise form to clearly show compliance or non-compliance with each discharge specification to facilitate review by Regional Board staff. All violations of requirements shall be clearly described. TKPOA shall note and explain any occurrence of noncompliance with any waste discharge requirement. If there are no violations to report, the Discharger shall certify that fact in writing. This report shall include a summary of operational problems and maintenance activities as described in Section I.D., above.
2. For every item where the requirements are not met, TKPOA shall submit a statement of the actions taken or proposed which will bring the discharge into full compliance with requirements at the earliest time and submit a timetable for completion. **Any omission of data should be accompanied by an explanation and plan to obtain the omitted data.**
3. All reports shall be signed by a responsible officer or duly authorized representative of TKPOA, shall include the name and contact information for a person knowledgeable about the contents of the report, and shall be submitted under penalty of perjury.

B. Submittal Periods

1. Monthly monitoring reports shall be submitted not later than the 15th day of the month following the sampling event and shall include a summary of water quality monitoring data in the format described in Section II.A above. Water quality data submitted by the Discharger shall be designated as Water Quality Data for the Circulation System

C. Operations and Maintenance Reporting Requirements

A brief summary of maintenance activities and any operational problems shall be submitted to the Regional Board with each monitoring report. The summary shall discuss:

1. Any modification or additions to the water circulation system
2. Any major maintenance conducted on the water circulation system.
3. Any major problems occurring in the water circulation system.
4. The calibration of any measuring devices.
5. Aquatic plant removal operations conducted by the Discharger during the monitoring period. The estimated quantity of aquatic plants mechanically removed from the lagoon and/or marina during the monitoring period shall be reported with a map indicating the general locations of any aquatic plant removal activities. Quantities shall be indicated by the estimated volume (in cubic yards or cubic meters) of freshly harvested plant matter.

Ordered by: _____

Dated: _____

PATTY Z. KOUYOUMDJIAN
EXECUTIVE OFFICER

Attachments: 1. General Provisions for Monitoring and Reporting (September 1, 1994)

ATTACHMENT 1
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION
GENERAL PROVISIONS
FOR MONITORING AND REPORTING

1. **SAMPLING AND ANALYSIS**

- a. All analyses shall be performed in accordance with the current edition(s) of the following documents:
 - i. Standard Methods for the Examination of Water and Wastewater
 - ii. Methods for Chemical Analysis of Water and Wastes, EPA
- b. All analyses shall be performed in a laboratory certified to perform such analyses by the California State Department of Health Services or a laboratory approved by the Regional Board Executive Officer. Specific methods of analysis must be identified on each laboratory report.
- c. Any modifications to the above methods to eliminate known interferences shall be reported with the sample results. The methods used shall also be reported. If methods other than EPA-approved methods or Standard Methods are used, the exact methodology must be submitted for review and must be approved by the Regional Board Executive Officer prior to use.
- d. The discharger shall establish chain-of-custody procedures to insure that specific individuals are responsible for sample integrity from commencement of sample collection through delivery to an approved laboratory. Sample collection, storage, and analysis shall be conducted in accordance with an approved Sampling and Analysis Plan (SAP). The most recent version of the approved SAP shall be kept at the facility.
- e. The discharger shall calibrate and perform maintenance procedures on all monitoring instruments and equipment to ensure accuracy of measurements, or shall insure that both activities will be conducted. The calibration of any wastewater flow measuring device shall be recorded and maintained in the permanent log book described in 2.b, below.
- f. A grab sample is defined as an individual sample collected in fewer than 15 minutes.
- g. A composite sample is defined as a combination of no fewer than eight individual samples obtained over the specified sampling period at equal intervals. The volume of each individual sample shall be proportional to the discharge flow rate at the time of sampling. The sampling period shall equal the discharge period, or 24 hours, whichever period is shorter.

2. OPERATIONAL REQUIREMENTS

h. Sample Results

Pursuant to California Water Code Section 13267(b), the discharger shall maintain all sampling and analytical results including: strip charts; date, exact place, and time of sampling; date analyses were performed; sample collector's name; analyst's name; analytical techniques used; and results of all analyses. Such records shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.

i. Operational Log

Pursuant to California Water Code Section 13267(b), an operation and maintenance log shall be maintained at the facility. All monitoring and reporting data shall be recorded in a permanent log book.

3. REPORTING

j. For every item where the requirements are not met, the discharger shall submit a statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time, and shall submit a timetable for correction.

k. Pursuant to California Water Code Section 13267(b), all sampling and analytical results shall be made available to the Regional Board upon request. Results shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.

l. The discharger shall provide a brief summary of any operational problems and maintenance activities to the Board with each monitoring report. Any modifications or additions to, or any major maintenance conducted on, or any major problems occurring to the wastewater conveyance system, treatment facilities, or disposal facilities shall be included in this summary.

m. Monitoring reports shall be signed by:

iii. In the case of a corporation, by a principal executive officer at least of the level of vice-president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates;

iv. In the case of a partnership, by a general partner;

v. In the case of a sole proprietorship, by the proprietor; or

- vi. In the case of a municipal, state or other public facility, by either a principal executive officer, ranking elected official or other duly authorized employee.
- n. Monitoring reports are to include the following:
 - i. Name and telephone number of individual who can answer questions about the report.
 - ii. The Monitoring and Reporting Program Number.
 - iii. WDID Number 6A265300900.
- o. Modifications

This Monitoring and Reporting Program may be modified at the discretion of the Regional Board Executive Officer.

4. NONCOMPLIANCE

Under Section 13268 of the Water Code, any person failing or refusing to furnish technical or monitoring reports, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in an amount of up to one thousand dollars (\$1,000) for each day of violation.